

IN THE CLAIMS:

1. (Currently Amended) A method, comprising:
generating a real-time video signal of the video image
by a camera sensor,
generating a real-time horizontally downsampled video
signal using horizontal downscaling of the real-time video
signal by the camera sensor using combining weighted pixels
values according to a predetermined algorithm, and
generating a real-time vertically and horizontally
downsampled video signal using vertical downscaling of the
real-time horizontally downsampled video signal by a
processing block,
wherein the horizontal downscaling and the vertical
downscaling are performed separately in time.

2. (Previously Presented) The method of claim 1,
wherein said horizontal downscaling is performed without a
line memory and before said generating the real-time
vertically and horizontally downsampled video signal, the
method further comprises:

providing said real-time horizontally downsampled video
signal from the camera sensor to the processing block
through a camera compact port bus of the image generating
and processing block.

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The method of claim 1,
further comprising:

 providing the real-time vertically and horizontally
downscaled video signal indicative of the video image
through an internal bus to a real-time viewfinder display
and displaying said video image on the real-time viewfinder
display.

6. (Cancelled)

7. (Cancelled)

8. (Previously Presented) The method of claim 1, wherein
the image generating and processing block is a part of a
camera-phone mobile device and the method further
comprises:

 encoding the real-time vertically and horizontally
downscaled video signal by a video packing block of the
image generating and processing block for generating an
encoded video signal, and

 providing said encoded video signal through a further
internal bus to at least one of: a file/stream block and a
phone memory of the camera-phone mobile device.

9. (Previously Presented) The method of claim 1,
further comprising:

 encoding the vertically and horizontally downscaled
video signal by a video packing block of the image

generating and processing block for generating an encoded video signal.

10. (Currently Amended) An image generating and processing block, comprising:

a camera sensor, responsive to a video image, configured to generate a real-time video signal of the video image and further configured to generate a real-time horizontally downsampled video signal using horizontal downscaling of the real-time video signal using combining weighted pixels values according to a predetermined algorithm; and

a processing block, responsive to the real-time horizontally downsampled video signal, configured to generate a real-time vertically and horizontally downsampled video signal using vertical downscaling of the real-time horizontally downsampled video signal,

wherein the horizontal downscaling and the vertical downscaling are performed separately in time.

11. (Previously Presented) The image generating and processing block of claim 10, wherein the camera sensor comprises a camera memory.

12. (Previously Presented) The image generating and processing block of claim 10, wherein the processing block comprises a processing memory.

13. (Previously Presented) The image generating and processing block of claim 10, wherein said horizontal downscaling is performed without a line memory and the image generating and processing block further comprises:

a camera compact port bus, responsive to the real-time horizontally downsampled video signal from the camera sensor, configured to provide the real-time horizontally downsampled video signal to the processing block.

14. (Currently Amended) A camera-phone mobile device, comprising:

an image generating and processing block configured to generate a real-time vertically and horizontally downsampled video signal of a video image, and configured to encode said real-time vertically and horizontally downsampled video signal for generating an encoded video signal, wherein said real-time vertically and horizontally downsampled video signal is horizontally downsampled first and separate from vertical downscaling to provide a real-time horizontally downsampled video signal using combining weighted pixels values according to a predetermined algorithm without using a line memory; and

a real-time viewfinder display, responsive to the real-time vertically and horizontally downsampled video signal, configured to provide a display of the video image indicative by said real-time vertically and horizontally downsampled video signal.

15. (Previously Presented) The camera-phone mobile device of claim 14, further comprising:

a file/stream block, responsive to the encoded signal, configured to provide a call connection to other mobile devices; and

a phone memory, responsive to the encoded signal, configured to provide the encoded signal.

16. (Previously Presented) The camera-phone mobile device of claim 14, wherein the image generating and processing block comprises:

a camera sensor, responsive to the video image, configured to generate the real-time video signal of the video image and further configured to generate said real-time horizontally downsampled video signal using horizontal downscaling of the real-time video signal; and

a processing block, responsive to the real-time horizontally downsampled video signal, configured to generate the real-time vertically and horizontally downsampled video signal using vertical downscaling of the real-time horizontally downsampled video signal.

17. (Previously Presented) The camera-phone mobile device of claim 16, wherein the processing block is a base band engine of the camera-phone mobile device.

18. (Previously Presented) The camera-phone mobile device of claim 16, wherein the camera sensor comprises a camera memory.

19. (Previously Presented) The camera-phone mobile device of claim 16, wherein the processing block comprises a processing memory.

20. (Previously Presented) The camera-phone mobile device of claim 16, further comprising:

a camera compact port bus, responsive to the real-time horizontally downsampled video signal from the camera sensor, configured to provide the real-time horizontally downsampled video signal to the processing block.

21. (Currently Amended) A method, comprising:

generating a real-time video signal of the video image by a camera sensor; and

generating a real-time horizontally downsampled video signal using horizontal downscaling of the real-time video signal by the camera sensor using combining weighted pixels values in the same row according to a predetermined algorithm without using a line memory,

wherein the horizontal downscaling is performed separately in time from vertical downscaling.

22 (Previously Presented) The method of claim 21, further comprising:

generating a real-time vertically and horizontally downsampled video signal using vertical downscaling of the

real-time horizontally downsampled video signal by said camera sensor or by a processing block of the image generating and processing block.

23. (Previously Presented) The method of claim 22, wherein pixel color components of a downsampled image comprised in said real-time horizontally downsampled video signal have substantially equal phases.

24. (Currently Amended) An electronic device, comprising:
a camera sensor, configured to generate a real-time video signal of the video image and further configured to generate a real-time horizontally downsampled video signal using horizontal downscaling of the real-time video signal by the camera sensor using combining weighted pixels values in the same row according to a predetermined algorithm without using a line memory,

wherein the horizontal downscaling is performed separately in time from vertical downscaling.

25. (Previously Presented) The electronic device of claim 24, wherein said camera sensor is still further configured to generate a real-time vertically and horizontally downsampled video signal using vertical downscaling of the real-time horizontally downsampled video signal.

26. (Previously Presented) The electronic device of claim 24, wherein pixel color components of a downsampled image comprised in said real-time horizontally downsampled video signal have substantially equal phases.

27. (Previously Presented) The camera-phone mobile device of claim 14, wherein the image generating and processing block comprises:

a camera sensor, responsive to the video image, configured to generate the real-time video signal of the video image and further configured to generate said real-time horizontally downsampled video signal using horizontal downscaling of the real-time video signal and is still further configured to generate a real-time vertically and horizontally downsampled video signal using vertical downscaling of the real-time horizontally downsampled video signal.

28. (Previously Presented) The method of claim 1, wherein pixel color components of a downsampled image comprised in said real-time horizontally downsampled video signal have substantially equal phases.

29. (Previously Presented) The image generating and processing block of claim 10, wherein pixel color components of a downsampled image comprised in said real-time horizontally downsampled video signal have substantially equal phases.